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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/897,820	06/29/2001	Alan J. Soucy	APE-001	2518

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EXAMINER

KEENAN, JAMES W

ART UNIT PAPER NUMBER

3652

DATE MAILED: 08/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/897,820

Applicant(s)

SOUCY ET AL.

Examiner

James Keenan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2004 and 14 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/29/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

1. Claims 16-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/14/04.
2. Claim 10 is objected to because of the following informalities: line 2, "form" should be --from--. Appropriate correction is required.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-5 and 7-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mages et al (US 5,772,386), previously cited.

Mages et al show in the figure 18-19 embodiment a pod door opener comprising a door opening mechanism having a horizontal movement mechanism 94 which removes a door from a pod (not shown in these figures but equivalent to the pod and door 24, 30 in figure 4) in a horizontal direction, and a rotary movement mechanism 90 which moves the door in a vertical direction (as seen in phantom) after the horizontal movement, a bulkhead 95 having a plane in which seal 96 lies, a pod side (toward the bottom of figure 19), an equipment side (top of figure 19), and an aperture 83 through which the door passes when removed from the pod by the door opener, and a work volume disposed on the equipment side in which the door opening mechanism operates. Although an advantage of the figure 18 embodiment is the decrease in depth

of the door opener, there is no specific disclosure that such depth does not exceed 80 mm from the plane of the seal.

Nevertheless, it would have been obvious for one of ordinary skill in the art at the time of the invention to have constructed the apparatus of Mages et al such that the depth of the work volume did not exceed 80 mm, as this would simply be the discovery of an optimum range or value which, when the general conditions of a claim are otherwise disclosed, has been held to involve only routine skill. This also applies to the various dimensions set forth in claims 2-5.

Re claims 7-8, element 94 is a bi-directional pneumatic drive.

Re claim 9, the substitution of a lead screw drive in place of the rotary drive is considered an obvious alternate equivalent design choice.

Re claim 10, rotary drive 90, although not explicitly disclosed, is probably pneumatic, and if not, making it so would have been an obvious design expediency.

Re claim 11, the addition of a pinch avoidance system is considered an obvious safety feature. Note frame 84 attached to the bulkhead.

Re claims 12-13, the use of a door key latch mechanism having the features set forth is considered an obvious and well known design expediency.

Re claim 14, the use of monocoque construction, if not inherent, is considered an obvious design expediency.

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mages et al in view of Mastroianni (US 6,068,668), previously cited.

Mages et al does not disclose a sensor for sensing placement and position of the pod.

Mastroianni shows a similar pod mounting apparatus wherein sensor 30 determines proper placement and position of the pod.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have modified the apparatus of Mages et al by utilizing a sensor to determine proper placement and positioning of the pod, as shown by Mastroianni, as this would provide improved and operational efficiency.

6. Applicant's arguments with respect to claims 1-5 and 7-15 have been considered but are moot in view of the new ground(s) of rejection.

It is noted that, despite applicant's assertion to the contrary, the figure 18-19 embodiment of Mages et al does show a door opening mechanism which first moves in a horizontal direction and then moves in a vertical direction. While the vertical movement may be rotational, nothing in the claims precludes this.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

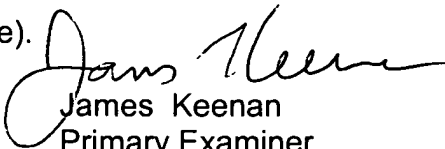
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Keenan whose telephone number is 703-308-2559. The examiner's supervisor, Eileen Lillis can be reached on 703-308-3248. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


James Keenan
Primary Examiner
Art Unit 3652

jwk
8/26/04